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Maine Agricultural Experiment Station

BULLETIN No. 66.

AUGUST, 1900.

FERTILIZER INSPECTION.

This Bulletin contains the analyses of samples collected by the Station of all brands of Fertilizers licensed in 1900.

Requests for the Bulletins should be addressed to the
EXPERIMENT STATION,
Orono, Maine.

MAINE

AGRICULTURAL EXPERIMENT STATION

ORONO, MAINE.

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FERTILIZER INSPECTION.

CHAS. D. WOODS, Director.

J. M. BARTLETT, Chemist in charge of Fertilizer Analysis.

The law regulating the sale of commercial fertilizers in this State calls for two bulletins each year. The first of these contains the analyses of the samples received from the manufacturer, guaranteed to represent, within reasonable limits, the goods to be placed upon the market later. The second bulletin contains the analyses of the samples collected in the open market by a representative of the Station.

The analyses of the manufacturer's samples for this year were published early in March. The present bulletin contains the analyses of the Station samples and of such of the manufacturer's samples as were received after Bulletin 50 was issued.

The Guaranteed Analysis.

The law requires that there shall be affixed to each package of fertilizer offered for sale in the State, "a plainly printed statement clearly and truly certifying the number of net pounds in the package sold or offered for sale, the name or trade mark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business and a chemical analysis stating the percentage of nitrogen, or its equivalent in ammonia in available form, of potash soluble in water, and of phosphoric acid in available form, soluble and reverted, as well as the total phosphoric acid, and the law directs that there shall be filed annually with the Director of the Maine Agricultural Experiment Station a *certified* copy of the above statement. Very soon after Bulletin 60, containing the analyses of the manufacturers' samples, was distributed a correspondent called our attention to the fact that, in the case of one prominent brand, there was considerable discrepancy between the guarantee published by the Station and that printed on the package. The correspondent also sent us printed matter in which a still different

claim was made by the manufacturer as to the composition of the goods in question. To see if this was at all common, the inspector was instructed to take an exact copy of all guaranteed analyses found on the packages sampled. As a result it was found that 70 different brands carried, in the case of at least one of the ingredients, a different statement on the bag from the certified statement filed with the Station. Some of these cases may be explained by the goods being last year's goods. We analyzed no fertilizers that the manufacturers' agents *said* were last year's goods. In about one-third of the cases the figures on the packages are lower (but only slightly lower) than the certified guarantees. In a few instances the manufacturers make no claim on the package for phosphoric acid called for by their certificate. The tankage of the Portland Rendering Company carried no guaranteed analysis on the package. In the other cases the guarantee on the package is larger and frequently much larger than the certified copy.

The tables on pages 128-131 gives the minimum certified guaranteed analysis; the minimum guarantee on the package and the percentages found in the sample collected by the Station. The figures under the head of "found" are those showing the actual composition of the samples.

The Results of the Analyses.

The tables on pages 120 to 127 contain the results of the analyses of the samples collected by the inspector from goods in the open market. The figures which were given as the percentages of valuable ingredients guaranteed by the manufacturers are the minimum percentages of the certified guarantee. If, for instance, the guarantee is 2 to 3 per cent. of nitrogen, it is evident that the dealer cannot be held to have agreed to furnish more than 2 per cent., and so this percentage is taken as actual guarantee. The figures under the head of "found" are those showing the actual composition of the samples. Whenever the sample examined contains less than the guaranteed percentage of any ingredient the deficiency is indicated in the table by a †.

A comparison of the results of the analyses of the samples collected by the Station with the percentages guaranteed by the manufacturers shows, that many of the manufacturers do not

intend to do much more than make good the minimum guarantee, and it is not surprising that this results in some of the goods falling below the guarantee in one or more ingredients. The table which follows gives the names of the goods and the ingredients in which they are deficient. No brand is included in this list unless it falls short at least one-tenth in one or more of its ingredients.

A LIST OF FERTILIZERS SOLD IN MAINE IN 1900 THE OFFICIALLY COLLECTED SAMPLES OF WHICH CONTAINED LESS THAN NINE TENTHS OF THE GUARANTEED AMOUNTS OF ONE OR MORE OF THE FERTILIZING CONSTITUENTS.

Station number.	Kind of Fertilizer	Deficient in
2408	Blanchard's Fish, Bone and Potash	Total phosphoric acid.
2409	Blanchard's Grass and Grain Fertilizer	Nitrogen and potash.
2410	Blanchard's Ground Fish Scrap	Potash.
2427	Stockbridge Potato and Vegetable Manure	Nitrogen.
2428	Stockbridge Seeding Down Manure	Nitrogen.
2477	Swift's Lowell Ground Bone	Nitrogen.
2506	Philbrick's Fertilizer.....	Nitrogen.
2508	Provincial Chemical Fertilizer Co.'s Potato Phosphate	Potash.
2518	Read's Sure Catch Fertilizer	Available and total phosphoric acid.
2520	Read's Sampson Fertilizer	Available phosphoric acid
2531	Sagadahoc Special Potato Fertilizer (sampled at Bangor)	Nitrogen.
2533	Yankee Fertilizer	Total phosphoric acid and nitrogen.
2551	Crocker's Potato, Hop and Tobacco Phosphate....	Nitrogen.
2556	Sagadahoc Special Potato Fertilizer (sampled at Bowdoinham)	Nitrogen.
2557	Sagadahoc Superphosphate.....	Nitrogen.

While the number of brands which are considerably below their guarantee in one or more ingredients is quite large, (15), it is less than last year and there is little reason for thinking that there is intention to defraud. It frequently happens that a fertilizer which is below in one ingredient is considerably above in others. While this frees the manufacturer from suspicion of attempting to defraud, it is, nevertheless, a serious defect in the fertilizer. It is not enough that a fertilizer contains an equivalent amount of some other kind of plant food. When the purchaser pays for fifty pounds of nitrogen he is not rightly treated if the manufacturer gives him thirty pounds of nitrogen, even though he gives him enough more of potash or phosphoric acid to make a financial equivalent.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900.

Station number.	Manufacturer, place of business and brand.	Sampled at
	HIRAM BLANCHARD, EASTPORT, ME.	
2408	Blanchard's Fish, Bone and Potash	Houlton
2409	Blanchard's Grass and Grain Fertilizer	Eastport
2410	Blanchard's Ground Fish Scrap	Eastport
	THE BOWKER FERTILIZER CO., BOSTON, MASS.	
2411	Bowker's Corn Phosphate	Bangor
2412	Bowker's Early Potato Manure	Houlton
2413	Bowker's Farm and Garden Phosphate	Portland
2414	Bowker's Fresh Ground Bone	Portland
2415	Bowker's Hill and Drill Phosphate	Bangor
2416	Bowker's Potash Bone	Belfast
2417	Bowker's Potato and Vegetable Fertilizer	Bangor
2418	Bowker's Potato and Vegetable Phosphate	Belfast
2419	Bowker's Six Per Cent Potato Fertilizer	Houlton
2420	Bowker's Square Brand Bone and Potash	Portland
2421	Bowker's Staple Phosphate or Three Per Cent Fertilizer	Bangor
2422	Bowker's Sure Crop Phosphate	Portland
2423	Bowker's Ten Per Cent Manure	Houlton
2424	Gloucester Fish and Potash	Bangor
2425	Stockbridge Corn and Grain Manure	Portland
2426	Stockbridge Pea and Bean Manure	Bangor
2427	Stockbridge Potato and Vegetable Manure	Portland
2428	Stockbridge Potato and Vegetable Manure	Bangor
2428	Stockbridge Seeding Down Manure	Bangor
	BRADLEY FERTILIZER CO., BOSTON, MASS.	
2429	Bradley's Complete Manure for Potatoes and Vegetables	Houlton
2546	Bradley's Complete Manure for Potatoes and Vegetables	Caribou
2430	Bradley's Corn Phosphate	Portland
2547	Bradley's Corn Phosphate	Bangor
2431	Bradley's Eureka Fertilizer	Bangor
2432	Bradley's Niagara Phosphate	Bangor
2433	Bradley's Potato Fertilizer	Belfast
2548	Bradley's Potato Fertilizer	Portland
2434	Bradley's Potato Manure	Houlton
2435	Bradley's X. L. Superphosphate	Bangor
	CLARK'S COVE FERTILIZER CO., BOSTON, MASS.	
2436	Bay State Fertilizer	Portland
2437	Bay State Fertilizer, G. G.	Bangor
2438	Bay State Fertilizer for Seeding Down	Bangor
2439	Defiance Phosphate	Bangor
2440	King Philip Alkaline Guano	Portland
	CLEVELAND DRYER CO., BOSTON, MASS.	
2441	Cleveland Fertilizer for All Crops	Bangor
2442	Cleveland Potato Phosphate	Portland
2443	Cleveland Seeding Down Fertilizer	Bangor
2444	Cleveland Superphosphate	Portland
	E. FRANK COE CO., NEW YORK, N. Y.	
2445	E. Frank Coe's Celebrated Special Grass and Grain Fertilizer	Bangor
2446	E. Frank Coe's Columbian Corn Fertilizer	Portland
2447	E. Frank Coe's Columbian Potato Fertilizer	Bangor

ANALYSES OF STATION SAMPLES, 1900.

Station number.	NITROGEN.				PHOSPHORIC ACID.								POTASH.	
	Soluble in water.	Insoluble in water.	Total.		Soluble.	Reverted.	Insoluble.	Available.		Total.		Found.	Guaranteed.	
			Found.	Guaranteed.				Found.	Guaranteed.					
	%	%	%	%	%	%	%	%	%	%	%	%	%	
2408	1.32	2.08	3.40	3.00	.....	3.22	.31	3.22	3.00	3.53	4.00	3.15	3.00
2409	1.10	2.70	†3.80	4.47	.....	3.41	.65	3.41	3.00	4.06	4.28	†1.30	2.00
2410	1.14	2.54	†3.68	4.00	.....	3.65	.53	3.65	3.00	4.18	4.00	†.89	1.00
2411	.43	1.20	1.63	1.60	4.19	4.13	1.90	8.32	7.00	10.22	9.00	2.49	2.00	
2412	2.41	.78	3.19	3.00	5.70	2.10	2.17	7.80	7.00	9.97	9.00	7.58	7.00	
2413	.54	1.12	1.66	1.50	6.15	3.59	2.45	9.74	8.00	12.19	10.00	2.26	2.00	
2414	.42	2.26	2.68	2.25	.....	.....	.....	.....	.....	24.10	24.00	.....	.....
2415	1.18	1.08	2.26	2.25	4.94	3.96	2.58	†8.90	9.00	11.48	12.00	2.30	2.00	
2416	.15	.66	.81	.75	1.14	6.58	2.71	7.72	6.00	10.43	8.00	2.57	2.00	
2417	.85	1.66	2.51	2.25	6.70	2.92	2.90	9.62	8.00	12.52	10.00	4.58	4.00	
2418	.52	1.14	1.66	1.50	7.24	3.24	2.12	10.48	8.00	12.60	10.00	2.34	2.00	
2419	.24	.68	.92	.75	5.14	3.92	1.80	9.06	7.00	10.86	10.00	6.18	6.00	
2420	.51	1.34	1.85	1.50	1.85	4.80	5.60	6.65	6.00	12.25	12.00	2.51	2.00	
2421	.22	.62	.84	.75	3.60	5.22	1.66	8.82	8.00	10.48	10.00	3.28	3.00	
2422	.24	.72	.96	.75	5.83	3.86	2.39	9.69	9.00	12.08	11.00	2.65	2.00	
2423	.20	.62	.82	.75	2.57	4.41	3.40	6.98	6.00	10.38	8.00	10.44	10.00	
2424	.16	.68	.84	.75	5.26	5.03	2.04	10.29	6.00	12.33	9.00	1.35	1.00	
2425	1.56	1.52	3.02	3.00	7.46	2.43	1.22	9.89	8.00	11.11	10.00	7.07	6.00	
2426	.20	2.00	2.20	2.00	3.29	3.87	4.12	7.16	6.00	11.28	8.00	11.59	6.00	
2427	1.20	1.64	†2.84	3.25	4.72	2.44	1.49	7.16	6.00	8.65	7.00	†9.92	10.00	
2545	1.36	2.00	3.36	3.25	5.41	2.45	1.27	7.86	6.00	9.13	7.00	10.23	10.00	
2428	.73	1.32	†2.05	2.50	3.47	4.54	2.69	8.01	6.00	10.70	10.00	10.22	10.00	
2429	1.71	1.28	†2.99	3.30	5.41	3.44	1.50	8.85	8.00	10.35	9.00	7.10	7.00	
2546	1.54	1.58	†3.12	3.30	5.29	3.26	1.80	8.55	8.00	10.35	9.00	7.71	7.00	
2430	.94	1.15	2.08	2.06	5.70	3.45	2.31	9.15	8.00	11.46	10.00	1.89	1.50	
2547	.52	1.78	2.30	2.06	6.13	3.54	2.34	9.67	8.00	12.01	10.00	2.02	1.50	
2431	.22	.98	1.20	1.03	5.63	2.55	1.77	8.18	8.00	9.95	9.00	2.25	2.00	
2432	.01	1.14	1.15	.82	3.22	5.09	1.69	8.31	7.00	10.00	8.00	1.35	1.08	
2433	.72	1.36	2.08	2.06	6.44	2.71	1.54	9.15	8.00	10.69	10.00	3.17	3.00	
2548	.97	1.15	2.12	2.06	5.94	2.71	1.97	8.65	8.00	10.62	10.00	3.18	3.00	
2434	.91	1.60	2.51	2.50	4.36	2.12	2.16	6.48	6.00	8.64	8.00	5.58	5.00	
2435	.95	1.56	2.51	2.50	6.73	2.99	2.10	9.72	9.00	11.82	11.00	2.32	2.00	
2436	1.44	1.06	2.50	2.47	6.09	3.01	1.99	9.10	9.00	11.09	10.00	2.30	2.00	
2437	.61	1.56	2.17	2.06	5.36	4.29	2.43	9.65	8.00	12.08	9.00	2.08	1.50	
2438	.27	.86	1.13	1.03	5.55	3.55	1.75	9.10	8.00	10.85	10.00	2.47	2.00	
2439	.43	.86	1.29	.82	4.22	4.86	2.37	9.08	7.00	11.45	9.00	1.80	1.00	
2440	.32	.88	1.20	1.03	4.78	3.71	2.89	8.49	8.00	13.38	9.00	2.16	2.00	
2441	.41	.74	1.15	1.03	5.53	3.84	1.28	9.37	8.00	10.65	9.00	2.29	2.00	
2442	1.06	1.18	2.24	2.05	5.66	2.86	2.00	8.52	8.00	10.52	10.00	3.29	3.00	
2443	.35	.88	1.23	1.03	4.88	3.77	1.66	8.65	8.00	10.31	9.00	2.39	2.00	
2444	.97	1.10	2.07	2.03	6.20	2.48	2.30	8.68	8.00	10.98	9.00	1.87	1.50	
2445	.44	.64	1.08	.80	7.06	2.90	2.44	9.96	8.50	12.40	10.00	2.08	1.25	
2446	.71	.48	†1.19	1.20	5.40	3.66	3.29	9.06	8.50	12.35	9.50	2.55	2.50	
2447	.72	.70	1.42	1.20	5.80	3.44	2.51	9.24	8.50	11.75	10.00	*2.81	2.50	

* Potash largely sulphate.

†Below guarantee.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900.

Station number.	Manufacturer, place of business and brand.	Sampled at
2448	E. Frank Coe's Excelsior Potato Fertilizer	Portland
2549	E. Frank Coe's Excelsior Potato Fertilizer	Bangor
2449	E. Frank Coe's High Grade Ammoniated Bone Superphosphate	Portland
2450	E. Frank Coe's High Grade Potato Fertilizer	Bangor
2451	E. Frank Coe's New Englander Corn Fertilizer	Portland
2452	E. Frank Coe's New Englander Potato Fertilizer	Bangor
2453	E. Frank Coe's Prize Brand Grain and Grass Fertilizer	Portland
2454	E. Frank Coe's Red Brand Excelsior Guano	Portland
2455	E. Frank Coe's Special Potato Fertilizer	Bangor
2550	E. Frank Coe's Special Potato Fertilizer	Portland
2456	E. Frank Coe's Standard Grade Am'd Bone Superphosphate CROCKER FERT. & CHEM. CO., BUFFALO, N. Y.	Bangor
2457	Crocker's Ammoniated Corn Phosphate	Belfast
2458	Crocker's Grass and Oats Fertilizer	Bangor
2459	Crocker's New Rival Ammoniated Superphosphate	Belfast
2460	Crocker's Potato, Hop and Tobacco Phosphate	Bangor
2551	Crocker's Potato, Hop and Tobacco Phosphate	Belfast
2461	Crocker's Superior Fertilizer	Bangor
	CUMBERLAND BONE PHOS. CO., PORTLAND, ME.	
2462	Cumberland Potato Fertilizer	Portland
2552	Cumberland Potato Fertilizer	Bangor
2463	Cumberland Seeding Down Manure	Bangor
2464	Cumberland Superphosphate	Bangor
	L. B. DARLING FERTILIZER CO., PAWTUCKET, R. I.	
2465	Darling's Blood, Bone and Potash	Houlton
	HENRY ELWELL & CO., NEW YORK, N. Y.	
2466	Elwell's Excelsior Potato Guano	Presque Isle ...
	GREAT EASTERN FERTILIZER CO., RUTLAND, VT.	
2467	Great Eastern Dissolved Bone	Bangor
2468	Great Eastern General Fertilizer	Bangor
2469	Great Eastern Grass and Oats Fertilizer	Belfast
2470	Great Eastern High Grade Potato Manure	Caribou
2471	Great Eastern Northern Corn Special	Belfast
2472	Great Eastern Potato Manure	Bangor
2553	Great Eastern Potato Manure	Belfast
	LISTER'S AGRICUL. CHEM. WORKS, NEWARK, N. J.	
2480	Lister's High Grade Special for Spring Crops	Portland
2481	Lister's Seeding Down Fertilizer	Portland
2482	Lister's Special Potato Fertilizer	Bangor
2554	Lister's Special Potato Fertilizer	Portland
2483	Lister's Success Fertilizer	Bangor
2484	Lister's U. S. Superphosphate	Bangor
	LOWELL FERTILIZER CO., BOSTON, MASS.	
2473	Swift's Lowell Animal Fertilizer	Bangor
2474	Swift's Lowell Bone Fertilizer	Portland
2475	Swift's Lowell Dissolved Bone and Potash	Bangor
2476	Swift's Lowell Fruit and Vine Fertilizer	Portland
2477	Swift's Lowell Ground Bone	Bangor
2478	Swift's Lowell Potato Manure	Portland
2479	Swift's Lowell Potato Phosphate	Portland

ANALYSES OF STATION SAMPLES, 1900.

Station Number.	NITROGEN.				PHOSPHORIC ACID.								POTASH.	
	Soluble in water.	Insoluble in water.	Total.		Soluble.	Reverted.	Insoluble.	Available.		Total.		Found.	Guaranteed.	
			Found.	Guaranteed.				Found.	Guaranteed.					
	%	%	%	%	%	%	%	%	%	%	%	%	%	
2448	1.57	1.54	3.11	2.40	5.69	1.71	2.20	7.40	7.00	9.60	9.00	*7.55	8.00	
2549	1.48	1.02	2.50	2.40	6.00	2.04	2.50	8.04	7.00	10.54	9.00	*7.59	8.00	
2449	.97	1.00	1.97	1.85	6.86	1.82	1.80	†8.68	9.00	10.48	11.00	2.72	2.50	
2450	1.32	1.14	2.46	2.40	5.75	2.24	2.13	7.99	7.00	10.12	9.00	*6.70	6.50	
2451	.50	.46	.96	.80	4.84	3.60	3.07	8.44	7.50	11.51	8.00	3.18	3.00	
2452	.35	.68	1.03	.80	5.97	3.10	1.61	9.07	7.50	10.68	8.00	3.61	3.00	
2453	.....	.....	.....	.....	6.76	3.60	3.35	†10.36	10.50	13.71	12.00	2.26	2.00
2454	2.45	.98	3.43	3.40	6.41	2.15	1.93	†8.56	9.00	10.49	10.00	*6.31	6.00	
2455	1.24	.54	1.78	1.60	6.61	2.08	2.17	8.69	8.00	10.86	10.00	†3.79	4.00	
2550	.88	.90	1.78	1.60	6.62	1.97	1.97	8.59	8.00	10.56	10.00	†3.89	4.00	
2456	.13	1.24	1.37	1.20	6.96	2.93	2.70	9.89	8.00	12.59	10.00	2.66	2.25	
2457	1.51	.64	2.15	2.05	6.78	2.27	1.55	9.05	8.00	10.60	9.00	2.00	1.50	
2458	.....	.....	.....	.....	6.91	3.38	1.38	†10.29	11.00	11.67	12.00	2.11	2.00
2459	.07	.96	1.03	1.03	6.47	3.17	2.24	9.64	8.00	11.88	9.00	2.06	2.00	
2460	1.08	.90	†1.98	2.05	6.27	2.76	1.72	9.03	8.00	10.75	9.00	3.26	3.25	
2551	.67	1.14	†1.81	2.05	6.42	2.57	2.17	8.99	8.00	11.16	10.00	3.42	3.25	
2461	.02	.98	1.00	.82	3.93	3.82	2.01	†7.75	8.00	9.76	9.00	†1.82	2.00	
2462	1.13	.78	†1.91	2.06	6.18	2.56	1.68	8.74	8.00	10.42	9.00	3.17	3.00	
2552	1.12	1.12	2.24	2.06	6.09	3.12	2.34	9.21	8.00	11.55	9.00	3.15	3.00	
2463	.....	1.24	1.24	1.03	6.85	1.84	1.62	8.69	8.00	10.31	10.00	2.27	2.00
2464	.....	2.14	2.14	2.06	4.85	4.20	2.33	9.05	8.00	11.38	9.00	2.32	1.50
2465	3.18	.60	†3.78	4.10	4.59	3.58	1.39	8.17	7.00	9.56	8.00	7.24	7.00	
2466	2.12	.54	†2.66	2.88	4.34	1.79	.35	6.13	5.50	6.48	.....	10.68	10.00
2467	.....	.....	.....	.....	8.48	4.67	.93	†13.15	14.00	14.08	14.00	.....	.....
2468	.02	1.00	1.02	.82	4.73	4.18	2.63	8.91	8.00	11.54	8.00	†3.71	4.00	
2469	.....	.....	.....	.....	6.54	3.63	1.81	†10.17	11.00	11.98	11.00	†1.97	2.00
2470	2.13	1.12	*3.25	3.29	3.70	3.28	2.12	6.98	6.00	9.10	7.00	†9.58	10.00	
2471	1.16	.96	2.12	2.06	6.06	2.98	1.86	9.04	8.00	10.90	8.00	1.51	1.50	
2472	.74	1.20	†1.94	2.06	5.94	2.87	1.95	8.81	8.00	10.76	8.00	3.38	3.25	
2553	1.08	.92	†2.00	2.06	6.17	2.71	2.38	8.88	8.00	11.26	8.00	†3.14	3.25	
2480	.80	1.08	1.88	1.85	5.24	3.22	3.11	†8.46	8.50	11.57	10.00	10.02	10.00	
2481	.43	.38	.81	.62	8.29	3.85	1.11	12.14	10.00	13.25	11.00	1.05	1.00	
2482	.87	.82	1.69	1.65	4.57	3.87	3.23	8.44	8.00	11.67	9.00	†2.90	3.00	
2554	.64	1.20	1.84	1.65	4.85	4.60	3.18	9.45	8.00	12.63	9.00	3.06	3.00	
2483	.58	.86	1.44	1.24	6.59	3.30	1.93	9.89	9.50	11.82	11.50	8.10	2.00	
2484	.12	1.30	1.42	1.32	3.03	4.72	3.04	7.75	7.00	10.79	8.00	2.37	2.00	
2473	1.52	1.12	2.64	2.46	3.55	6.09	1.86	9.64	9.00	11.50	10.00	4.13	4.00	
2474	.79	.96	1.75	1.64	4.36	3.71	2.87	8.07	8.00	10.94	9.00	3.35	3.00	
2475	.20	1.68	1.88	1.64	6.01	3.40	1.93	9.41	9.00	11.34	10.00	2.39	2.00	
2476	1.73	1.46	†3.19	3.29	5.43	3.56	1.03	8.99	7.00	10.02	8.00	6.48	6.00	
2477	.48	1.56	†2.04	2.46	.....	.....	.....	.....	.....	28.76	22.90	.....	.....
2478	.14	1.70	1.84	1.64	3.92	3.07	2.94	†6.99	7.00	9.93	8.00	*4.01	4.00	
2479	1.28	1.26	2.54	2.46	4.72	3.55	3.10	8.27	8.00	11.37	9.00	*7.03	6.00	

* Potash largely sulphate.

† Below guarantee.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900.

Station number.	Manufacturer, place of business and brand.	Sampled at
	NATIONAL FERTILIZER CO., BRIDGEPORT, CONN.	
2485	Chittenden's Ammoniated Bone Phosphate	Presque Isle...
2486	Chittenden's Complete Fertilizer	Fort Fairfield..
2487	Chittenden's Market Garden Fertilizer.....	Presque Isle...
	NEW ENGLAND FERTILIZER CO., BOSTON, MASS.	
2488	New England Corn Phosphate	Bangor
2489	New England Potato Fertilizer.....	Portland
2558	New England Potato Fertilizer.....	Bangor
	S. G. OTIS, HALLOWELL, MAINE.	
2490	Otis Potato Fertilizer	Houlton
2491	Otis Seeding Down Fertilizer	Skowhegan
2492	Otis Superphosphate.	North Deering.
	PACIFIC GUANO CO., BOSTON, MASS.	
2493	Pacific Guano Co.'s Grass and Grain Fertilizer	Bangor
2494	Pacific Guano Co.'s Nobsque Guano	Portland
2495	Pacific Guano Co.'s Potato Special.	Bangor
2496	Pacific Guano Co.'s Soluble Pacific Guano	Portland
	PACKERS' UNION FERTILIZER CO., NEW YORK, N. Y.	
2497	Packers' Union Animal Corn Fertilizer.....	Eddington.....
2498	Packers' Union Economical Vegetable Guano	Eddington.....
2499	Packers' Union High Grade Potato Manure.....	Eddington.....
2500	Packers' Union Universal Fertilizer.....	Eddington.....
2555	Packers' Union Universal Fertilizer	Bangor
2501	Packers' Union Wheat, Oats and Clover Fertilizer.....	Eddington
	PARMENTER & POLSEY FER. CO., PEABODY, MASS.	
2502	Parmenter & Polsey Fertilizer Co.'s Special Potato Fertilizer	Presque Isle ...
2503	Plymouth Rock Brand.	Caribou.....
2504	P. and P. Potato Fertilizer.....	Presque Isle ...
2505	Star Brand Superphosphate	Augusta
	EDWIN J. PHILBRICK, AUGUSTA, MAINE.	
2506	Philbrick's Fertilizer	Augusta
	PORTLAND RENDERING CO., PORTLAND, MAINE.	
2507	Portland Rendering Co.'s Bone Tankage	East Deering...
	PROVINCIAL CHEM. FER. CO., L't'd, ST. JOHN, N. B.	
2508	Provincial Chemical Fertilizer Co.'s Potato Phosphate.....	Presque Isle ...
	THE QUINNIPIAC CO., BOSTON, MASS.	
2509	Quinnipiac Climax Phosphate	Bangor
2510	Quinnipiac Corn Manure	Portland.....
2511	Quinnipiac Phosphate.....	Bangor
2512	Quinnipiac Potato Manure	Portland.....
2513	Quinnipiac Potato Phosphate.....	Bangor
2514	Quinnipiac Seeding Down Manure.....	Belfast.....
	READ FERTILIZER CO., NEW YORK, N. Y.	
2515	Read's Potato Manure	Caribou.....
2516	Read's Practical Potato Special.....	Bucksport.....
2517	Read's Standard Fertilizer.....	Bucksport.....
2518	Read's Sure Catch Fertilizer	Bucksport.....
2519	Read's Vegetable and Vine Fertilizer.....	Fort Fairfield...
2520	Read's Sampson Fertilizer.....	Bucksport.....

ANALYSES OF STATION SAMPLES, 1900.

Station number.	NITROGEN.				PHOSPHORIC ACID.								POTASH.	
	Soluble in water.	Insoluble in water.	Total.		Soluble.	Reverted.	Insoluble.	Available.		Total.		Found.	Guaranteed.	
			Found.	Guaranteed.				Found.	Guaranteed.	Found.	Guaranteed.			
2485	% .66	% 1.46	% 2.12	% 1.65	% 3.34	% 6.47	% 1.97	% 9.81	% 8.00	% 11.78	% 10.00	% 2.25	% 2.00	
2486	1.05	2.30	3.35	3.30	4.88	2.84	2.29	†7.72	8.00	10.01	10.00	6.14	6.00	
2487	1.01	1.56	2.57	2.45	3.56	2.82	2.10	6.38	6.00	8.48	8.00	5.68	5.00	
2488	.56	1.14	1.70	1.64	4.89	3.90	2.64	8.79	8.00	11.43	9.00	3.31	3.00	
2489	.36	1.26	†1.62	1.64	4.55	2.83	3.00	7.38	7.00	10.37	8.00	*4.00	4.00	
2558	.52	1.49	2.01	1.64	2.18	4.49	1.53	6.67	7.00	8.20	8.00	*4.47	4.00	
2490	1.12	.94	2.06	2.06	5.63	2.91	2.17	8.54	8.00	10.71	10.00	3.16	3.00	
2491	.62	.52	†1.14	1.25	5.57	2.66	2.50	8.23	8.00	10.73	10.00	2.40	2.00	
2492	1.02	1.10	2.12	2.06	6.14	2.22	2.39	8.36	8.00	10.75	10.00	1.75	1.50	
2493	.44	.80	1.24	.82	4.24	4.25	2.38	8.49	7.00	10.87	8.00	1.36	1.00	
2494	.51	.72	1.23	1.03	4.62	3.81	3.33	8.43	8.00	11.76	9.00	2.22	2.00	
2495	1.12	.96	2.08	2.05	5.89	3.11	2.50	9.00	8.00	11.50	9.00	†2.97	3.00	
2496	1.17	.96	2.13	2.06	5.94	2.43	2.33	8.37	8.00	10.70	9.00	1.93	1.50	
2497	1.22	1.40	2.62	2.47	6.62	3.41	1.78	10.03	9.00	11.81	10.00	2.36	2.00	
2498	.51	.70	†1.21	1.25	5.64	3.14	2.69	8.78	6.00	11.47	7.00	3.25	3.00	
2499	1.24	1.06	2.30	2.06	5.86	3.30	1.52	9.16	8.00	10.68	9.00	6.13	6.00	
2500	.71	.42	1.13	.82	5.08	3.64	2.54	8.72	8.00	11.26	9.00	†3.67	4.00	
2555	.57	.70	1.27	.82	4.81	3.71	2.78	8.52	8.00	11.30	9.00	†3.97	4.00	
2501	.....	.....	.....	.....	5.14	5.66	1.73	†10.80	11.00	12.53	12.00	2.14	2.00
2502	1.79	1.70	3.49	3.29	3.55	6.10	1.17	9.65	8.00	10.82	9.00	7.47	7.00	
2503	1.44	1.46	2.90	2.47	2.81	6.49	1.88	9.30	8.00	11.18	9.00	5.11	4.00	
2504	.79	1.18	1.97	1.64	4.00	3.94	1.42	7.94	6.00	9.36	7.00	†5.66	6.00	
2505	.73	1.22	1.95	1.64	2.81	5.43	1.14	8.24	7.00	9.38	8.00	3.27	2.50	
2506	.61	1.02	†1.63	2.00	3.22	4.40	2.40	7.62	7.00	10.02	9.00	6.34	5.00	
2507	.88	3.96	4.84	4.54	.37	9.27	6.27	9.64	.....	15.91	16.65	.....	.....
2508	2.33	.88	3.21	2.88	7.45	2.22	3.86	9.67	8.00	13.53	.....	†4.76	6.50
2509	.37	1.10	1.47	1.03	5.34	3.91	1.83	9.25	8.00	11.08	9.00	2.58	2.00	
2510	1.02	1.10	2.12	2.06	5.41	4.25	2.42	9.66	8.00	12.08	9.00	1.75	1.50	
2511	.94	1.70	2.64	2.47	5.95	3.94	2.09	9.89	9.00	11.98	10.00	2.24	2.00	
2512	1.31	1.18	2.49	2.47	4.20	4.10	.92	8.30	6.00	9.22	7.00	5.50	5.00	
2513	1.00	1.18	2.18	2.05	4.86	5.38	1.48	10.24	8.00	11.72	9.00	3.20	3.00	
2514	.20	1.06	1.26	1.03	5.42	2.55	2.44	†7.97	8.00	10.41	9.00	†1.97	2.00	
2515	1.02	1.34	†2.36	2.47	3.44	3.91	1.47	7.35	6.00	8.82	7.00	10.60	10.00	
2516	.16	.92	1.08	.83	2.45	3.66	.95	6.11	4.00	7.06	5.00	8.29	8.00	
2517	.23	.86	1.09	.83	5.61	2.97	2.35	8.58	8.00	10.93	9.00	4.23	4.00	
2518	.....	.....	.....	.....	2.41	4.20	1.64	†6.61	10.00	8.25	11.00	4.18	2.00
2519	.82	1.26	2.08	2.05	5.76	2.85	2.34	8.61	8.00	10.95	9.00	†5.85	6.00	
2520	.42	1.44	†1.86	2.05	4.54	2.55	1.60	†7.09	8.00	8.69	9.00	4.61	3.00	

* Potash largely sulphate.

† Below guarantee.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900.

Station number.	Manufacturer, place of business and brand.	Sampled at
	THE RUSSIA CEMENT CO., GLOUCESTER, MASS.	
2521	Essex Complete Manure for Corn, Grain and Grass	Bangor
2522	Essex Complete Manure for Potatoes, Roots and Vegetables..	Bangor
2523	Essex Corn Fertilizer	Bangor
2524	Essex Potato Fertilizer	Bangor
2525	Essex XXX Fish and Potash	Bangor
2526	Maine State Grange Chemicals	Bowdoinham ..
2527	Maine State Grange Potato Manure	Bowdoinham ..
2528	Maine State Grange Seeding Down Fertilizer	Bowdoinham ..
	SAGADAHOC FERTILIZER CO., BOWDOINHAM, ME.	
2529	Dirigo Fertilizer	Bangor
2530	Merrymeeting Superphosphate	Bangor
2531	Sagadahoc Special Potato Fertilizer	Bangor
2536	Sagadahoc Special Potato Fertilizer	Bowdoinham ..
2532	Sagadahoc Superphosphate	Bangor
2557	Sagadahoc Superphosphate	Bowdoinham ..
2533	Yankee Fertilizer	Bangor
	STANDARD FERTILIZER CO., BOSTON, MASS.	
2534	Standard A Brand	Portland
2535	Standard Complete Manure	Bangor
2536	Standard Fertilizer	Portland
2537	Standard Guano	Bangor
2538	Standard Special for Potatoes	Bangor
	JOHN WATSON, HOULTON, MAINE.	
2539	Watson's Improved High Grade Potato Manure	Houlton
	WILLIAMS & CLARK FERTILIZER CO., BOSTON, MASS.	
2540	Americus Ammoniated Bone Superphosphate	Portland
2541	Americus Corn Phosphate	Bangor
2542	Americus Potato Manure	Portland
2543	Royal Bone Phosphate for All Crops	Bangor
2544	Williams & Clark Fertilizer Co.'s Potato Phosphate	Portland

ANALYSES OF STATION SAMPLES, 1900.

Station number.	NITROGEN.				PHOSPHORIC ACID.								POTASH.	
	Soluble in water.	Insoluble in water.	Total.		Soluble.	Reverted.	Insoluble.	Available.		Total.		Found.	Guaranteed.	
			Found.	Guaran- teed.				Found.	Guaran- teed.	Found.	Guaran- teed.			
2521	%	%	%	%	%	%	%	%	%	%	%	%	%	
2522	.94	2.90	3.84	3.70	2.88	5.59	2.43	8.47	7.00	10.90	9.50	10.11	9.50	
2522	.54	3.42	3.96	3.70	3.19	4.96	2.88	8.15	7.00	11.03	9.00	*8.69	8.50	
2523	.59	1.54	2.13	2.00	1.68	7.09	5.11	†8.77	9.00	13.88	10.50	3.41	3.00	
2524	.47	1.56	2.03	2.00	2.45	6.51	4.52	†8.96	9.00	13.48	10.50	6.27	5.00	
2525	.86	1.90	2.76	2.10	2.85	6.71	5.87	9.56	9.00	15.43	12.00	2.82	2.25	
2526	1.14	1.70	2.84	2.50	2.91	6.44	4.60	9.35	8.00	13.95	12.00	5.44	4.00	
2527	.90	.78	1.68	1.50	3.40	7.56	3.24	10.96	9.00	14.20	12.00	†11.16	12.00	
2528	.16	1.44	1.60	1.50	1.52	5.34	7.17	†6.86	7.00	14.03	13.00	†5.47	5.50	
2529	.18	1.40	1.58	1.50	1.39	4.73	3.80	6.12	3.50	9.92	9.00	4.23	3.75	
2530	.83	.46	1.29	1.20	2.03	5.58	3.03	7.61	5.00	10.64	9.00	3.14	2.00	
2531	.33	1.08	†1.41	2.40	5.69	3.59	.62	9.28	6.50	9.90	9.50	9.64	7.00	
2532	.78	.68	†1.46	2.40	5.81	3.55	.64	9.36	6.50	10.00	9.50	9.73	7.00	
2532	.94	.98	†1.92	2.05	2.85	5.64	2.51	8.49	6.50	11.00	10.00	4.21	4.00	
2537	.84	.96	†1.80	2.05	3.77	5.30	2.08	9.07	6.50	11.15	10.00	4.60	4.00	
2533	.56	.46	1.02	.40	1.27	3.93	.66	†5.20	5.50	5.86	7.00	4.90	1.50	
2534	.50	.78	1.28	.82	2.99	4.98	3.42	7.97	7.00	11.39	9.00	1.58	1.00	
2535	2.48	.86	3.34	3.30	4.00	4.30	1.91	8.30	8.00	10.21	9.00	7.15	7.00	
2536	1.10	1.22	2.32	2.06	5.70	3.18	2.12	8.88	8.00	11.00	9.00	2.69	1.50	
2537	.57	.66	1.23	1.03	4.56	3.85	2.28	8.41	8.00	10.69	9.00	2.33	2.00	
2538	.94	1.26	2.20	2.05	5.69	3.79	2.12	9.48	8.00	11.60	9.00	3.14	3.00	
2539	1.12	1.60	†2.72	3.00	.67	5.17	1.95	†5.84	.6.00	7.79	7.00	†4.97	5.00	
2540	1.38	1.20	2.58	2.47	5.67	4.00	1.90	9.67	9.00	11.57	10.00	2.49	2.00	
2541	.62	1.58	2.20	2.06	5.89	3.55	2.05	9.44	8.00	11.49	9.00	1.94	1.50	
2542	1.00	1.10	2.10	2.06	5.21	3.57	2.15	8.78	8.00	10.93	9.00	3.42	3.00	
2543	.38	.72	1.10	1.03	5.80	3.62	1.84	9.42	8.00	11.26	9.00	2.63	2.00	
2544	1.24	1.12	†2.36	2.47	3.82	2.32	2.53	6.14	6.00	8.67	7.00	5.94	5.00	

* Potash largely sulphate.

† Below guarantee.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900, CARRYING ON THE PACKAGE A GUARANTEED ANALYSIS DIFFERING FROM THE CERTIFIED STATEMENT FILED WITH THE STATION DIRECTOR.

Station number.	Brand.	Sampled at
2408	Blanchard's Fish, Bone and Potash	Houlton
2409	Blanchard's Grass and Grain Fertilizer	Eastport
2410	Blanchard's Ground Fish Scrap.	Eastport
2411	Bowker's Corn Phosphate.	Bangor
2413	Bowker's Farm and Garden Phosphate.....	Portland
2415	Bowker's Hill and Drill Phosphate	Bangor
2417	Bowker's Potato and Vegetable Fertilizer.....	Bangor
2418	Bowker's Potato and Vegetable Phosphate.	Belfast
2423	Bowker's Ten Per Cent Manure	Houlton
2425	Stockbridge Corn and Grain Manure.....	Portland
2426	Stockbridge Pea and Bean Manure	Bangor
2427	Stockbridge Potato and Vegetable Manure.....	Portland
2545	Stockbridge Potato and Vegetable Manure.	Bangor
2428	Stockbridge Seeding Down Manure	Bangor
2432	Bradley's Niagara Phosphate.....	Bangor
2437	Bay State Fertilizer G. G	Bangor
2444	Cleveland Superphosphate	Portland
2445	E. Frank Coe's Celebrated Special Grass and Grain Fertilizer	Bangor
2446	E. Frank Coe's Columbian Corn Fertilizer	Portland
2447	E. Frank Coe's Columbian Potato Fertilizer	Bangor
2448	E. Frank Coe's Excelsior Potato Fertilizer	Portland
2449	E. Frank Coe's High Grade Ammoniated Bone Superphosphate	Portland
2450	E. Frank Coe's High Grade Potato Fertilizer	Bangor
2451	E. Frank Coe's New Englander Corn Fertilizer	Portland
2452	E. Frank Coe's New Englander Potato Fertilizer.	Bangor
2453	E. Frank Coe's Prize Brand Grain and Grass Fertilizer	Portland
2454	E. Frank Coe's Red Brand Excelsior Guano.....	Portland
2455	E. Frank Coe's Special Potato Fertilizer.	Bangor
2550	E. Frank Coe's Special Potato Fertilizer	Portland
2456	E. Frank Coe's Standard Grade Am'd Bone Superphosphate..	Bangor
2457	Crocker's Ammoniated Corn Phosphate	Belfast.
2460	Crocker's Potato, Hop and Tobacco Phosphate.....	Bangor
2551	Crocker's Potato, Hop and Tobacco Phosphate.	Belfast.
2462	Cumberland Potato Fertilizer	Portland
2552	Cumberland Potato Fertilizer	Bangor
2464	Cumberland Superphosphate.....	Bangor
2466	Elwell's Excelsior Potato Guano.....	Presque Isle ..
2467	Great Eastern Dissolved Bone	Bangor
2468	Great Eastern General Fertilizer.....	Bangor
2469	Great Eastern Grass and Oats Fertilizer.....	Belfast.....
2471	Great Eastern Northern Corn Special	Belfast.
2472	Great Eastern Potato Manure	Bangor

ANALYSIS OF STATION SAMPLES, 1900, CARRYING ON THE PACKAGE
A GUARANTEED ANALYSIS DIFFERING FROM THE CERTIFIED STATE-
MENT FILED WITH THE STATION DIRECTOR.

Station number.	NITROGEN.			AVAILABLE PHOSPHORIC ACID.			TOTAL PHOSPHORIC ACID.			POTASH.		
	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.
	%	%	%	%	%	%	%	%	%	%	%	%
2408	3.40	3.00	4.47	3.22	3.00	*	3.53	4.00	5.15	3.15	3.00	6.00
2409	3.80	4.47	4.47	3.41	3.00	*	4.06	4.28	5.15	1.30	2.00	3.00
2410	3.68	4.00	4.47	3.65	3.00	*	4.18	4.00	5.15	.89	1.00	*
2411	1.63	1.60	1.50	8.32	7.00	8.00	10.22	9.00	10.00	2.49	2.00	2.00
2413	1.66	1.50	1.50	9.74	8.00	9.00	12.19	10.00	11.00	2.26	2.00	2.00
2415	2.26	2.25	2.10	8.90	9.00	9.00	11.48	12.00	12.00	2.30	2.00	2.00
2417	2.51	2.25	2.25	9.62	8.00	9.00	12.52	10.00	11.00	4.58	4.00	4.00
2418	1.66	1.50	1.50	10.48	8.00	8.00	12.60	10.00	11.00	2.34	2.00	2.00
2423	.82	.75	.82	6.98	6.00	6.00	10.38	8.00	8.00	10.44	10.00	10.00
2425	3.02	3.00	3.00	9.89	8.00	7.00	11.11	10.00	10.00	7.07	6.00	6.00
2426	2.20	2.00	2.00	7.16	6.00	6.00	11.28	8.00	*	11.59	6.00	6.00
2427	2.84	3.25	3.20	7.16	6.00	6.00	8.65	7.00	8.00	9.92	10.00	10.00
2545	3.36	3.25	3.20	7.86	6.00	6.00	9.13	7.00	8.00	10.23	10.00	10.00
2428	2.05	2.50	2.25	8.01	6.00	8.00	10.70	10.00	10.00	10.22	10.00	10.00
2432	1.15	.82	.82	8.31	7.00	7.00	10.00	8.00	8.00	1.35	1.08	1.00
2437	2.17	2.06	1.85	9.65	8.00	8.50	12.08	9.00	10.00	2.08	1.50	2.00
2444	2.07	2.03	2.03	8.68	8.00	8.00	10.98	9.00	10.00	1.87	1.50	1.50
2445	1.08	.80	.80	9.96	8.50	9.00	12.40	*	10.00	2.08	1.25	1.25
2446	1.19	1.20	1.20	9.06	8.50	8.50	12.35	*	9.50	2.55	2.50	2.50
2447	1.42	1.20	1.20	9.24	8.50	8.00	11.75	*	10.00	2.81	2.50	2.50
2448	3.11	2.40	2.50	7.40	7.00	8.00	9.60	*	9.00	7.55	8.00	8.00
2449	1.97	1.85	1.85	8.68	9.00	9.00	10.48	*	11.00	2.72	2.25	2.25
2450	2.46	2.40	2.40	7.99	7.00	7.00	10.12	*	9.00	6.70	6.50	6.50
2451	.96	.80	.80	8.44	7.50	7.50	11.51	*	8.00	3.18	3.00	3.00
2452	1.03	.80	.80	9.07	7.50	7.00	10.68	*	8.00	3.61	3.00	3.00
2453	.....	.....	.....	10.36	10.50	10.50	13.71	*	12.00	2.26	2.00	2.00
2454	3.43	3.40	3.50	8.56	9.00	9.00	10.49	*	10.00	6.31	6.00	6.25
2455	1.78	1.60	1.65	8.69	8.00	8.00	10.86	*	10.00	3.79	4.00	4.00
2550	1.78	1.60	1.50	8.59	8.00	8.00	10.56	10.00	10.50	3.89	4.00	4.00
2456	1.37	1.20	1.25	9.89	8.00	9.00	12.59	*	10.00	2.66	2.25	2.25
2457	2.15	2.05	2.05	9.05	8.00	8.00	10.60	9.00	10.00	2.00	1.50	1.50
2460	1.98	2.05	2.05	9.03	8.00	8.00	10.75	9.00	10.00	3.26	3.25	3.00
2551	1.81	2.05	2.05	8.99	8.00	8.00	11.16	10.00	10.00	3.42	3.25	3.00
2462	1.91	2.06	2.06	8.74	8.00	8.00	10.42	9.00	10.00	3.17	3.00	3.00
2552	2.24	2.06	2.06	9.21	8.00	9.00	11.55	9.00	11.00	3.15	3.00	3.00
2464	2.14	2.06	2.06	9.05	8.00	8.00	11.38	9.00	10.00	2.32	1.50	1.50
2466	2.66	2.88	2.88	6.13	5.50	5.50	6.48	*	*	10.68	10.00	10.00
2467	.....	.....	.....	13.15	14.00	14.00	14.08	14.00	16.00	.....	.....	.....
2468	1.02	.82	.82	8.91	8.00	8.00	11.54	8.00	10.00	3.71	4.00	4.00
2469	.....	.....	.....	10.17	11.00	11.00	11.98	11.00	12.00	1.97	2.00	2.00
2471	2.12	2.06	2.06	9.04	8.00	8.00	10.98	8.00	9.00	1.51	1.50	1.50
2472	1.94	2.06	2.00	8.81	8.00	8.00	10.76	8.00	10.00	3.38	3.25	3.00

* Not guaranteed.

DESCRIPTIVE LIST OF STATION SAMPLES, 1900, CARRYING ON THE PACKAGE A GUARANTEED ANALYSIS DIFFERING FROM THE CERTIFIED STATEMENT FILED WITH THE STATION DIRECTOR.

Station number.	Brand.	Sampled at
2553	Great Eastern Potato Manure	Belfast
2476	Swift's Lowell Fruit and Vine Fertilizer	Portland
2477	Swift's Lowell Ground Bone	Bangor
2485	Chittenden's Ammoniated Bone Phosphate	Presque Isle ..
2486	Chittenden's Complete Fertilizer	Fort Fairfield..
2496	Pacific Guano Co.'s Soluble Pacific Guano	Portland
2506	Philbrick's Fertilizer	Augusta
2507	Portland Rendering Co.'s Bone Tankage	East Deering..
2508	Provincial Chemical Fertilizer Co.'s Potato Phosphate	Presque Isle ..
2509	Quinnipiac Climax Phosphate	Bangor
2510	Quinnipiac Corn Manure	Portland
2518	Read's Sure Catch Fertilizer	Bucksport
2519	Read's Vegetable and Vine Fertilizer	Fort Fairfield..
2520	Read's Sampson Fertilizer	Bucksport
2521	Essex Complete Manure for Corn, Grain and Grass	Bangor
2523	Essex Corn Fertilizer	Bangor
2524	Essex Potato Fertilizer	Bangor
2529	Dirigo Fertilizer	Bangor
2530	Merrymeeting Superphosphate	Bangor
2531	Sagadahoc Special Potato Fertilizer	Bangor
2556	Sagadahoc Special Potato Fertilizer	Bowdoinham ..
2532	Sagadahoc Superphosphate	Bangor
2557	Sagadahoc Superphosphate	Bowdoinham ..
2533	Yankee Fertilizer	Bangor
2536	Standard Fertilizer	Portland
2537	Standard Guano	Bangor
2541	Americus Corn Phosphate	Bangor
2543	Royal Bone Phosphate for All Crops	Bangor

ANALYSIS OF STATION SAMPLES, 1900, CARRYING ON THE PACKAGE
A GUARANTEED ANALYSIS DIFFERING FROM THE CERTIFIED STATE-
MENT FILED WITH THE STATION DIRECTOR.

Station number.	NITROGEN.			AVAILABLE PHOSPHORIC ACID.			TOTAL PHOSPHORIC ACID.			POTASH.		
	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.	Found.	Guarantee on certificate.	Guarantee on bag.
	%	%	%	%	%	%	%	%	%	%	%	%
2553	2.00	2.06	2.06	8.88	8.00	8.00	11.26	8.00	9.00	3.14	3.25	3.25
2476	3.19	3.29	2.47	8.99	7.00	8.00	10.62	8.00	9.00	6.48	6.00	6.00
2477	2.04	2.46	*	.....	5.00	*	28.76	22.90	*	.....	.....	.....
2485	2.12	1.65	1.85	9.81	8.00	7.00	11.78	10.00	9.00	2.25	2.00	2.00
2486	3.35	3.30	3.70	7.72	8.00	8.00	10.01	10.00	10.00	6.14	6.00	6.00
2496	2.13	2.06	2.06	8.37	8.00	8.00	10.70	9.00	10.00	1.93	1.50	1.50
2506	1.63	2.00	2.50	7.62	7.00	7.00	10.02	9.00	9.00	6.34	5.00	6.00
2507	4.84	4.54	*	9.64	*	*	15.91	16.65	*	.....	.....	.....
2508	3.21	2.88	3.09	9.67	8.00	8.00	13.53	*	*	4.76	6.50	6.50
2509	1.47	1.03	1.25	9.25	8.00	8.00	11.08	9.00	9.00	2.58	2.00	2.00
2510	2.12	2.06	2.06	9.66	8.00	8.00	12.08	9.00	10.00	1.75	1.50	1.50
2518	.....	.....	.....	6.61	10.00	6.00	8.25	11.00	7.00	4.18	2.00	4.00
2519	2.08	2.05	1.10	8.61	8.00	8.00	10.95	9.00	9.00	5.85	6.00	6.00
2520	1.86	2.05	1.65	7.09	8.00	6.00	8.69	9.00	7.00	4.61	3.00	4.00
2521	3.84	3.70	3.70	8.47	7.00	7.50	10.90	9.50	10.00	10.11	9.50	9.50
2523	2.13	2.00	2.00	8.77	9.00	9.00	13.88	10.50	11.00	3.41	3.00	3.00
2524	2.03	2.00	2.00	8.96	9.00	9.00	13.48	10.50	11.00	6.27	5.00	5.00
2529	1.58	1.50	2.00	6.12	3.50	*	9.92	9.00	9.00	4.23	3.75	4.50
2530	1.29	1.20	1.25	7.61	5.00	8.00	10.64	9.00	*	3.14	2.00	2.50
2531	1.41	2.40	2.25	9.28	6.50	8.00	9.90	9.50	9.00	9.64	7.00	8.00
2556	1.46	2.40	2.25	9.36	6.50	8.00	10.00	9.50	9.00	9.73	7.00	8.00
2532	1.92	2.05	2.25	8.49	6.50	9.00	11.00	10.00	10.00	4.21	4.00	4.00
2557	1.80	2.05	2.25	9.07	6.50	9.00	11.15	10.00	10.00	4.60	4.00	4.00
2533	1.02	.40	.82	5.20	5.50	*	5.86	7.00	6.00	4.90	1.50	*
2536	2.32	2.06	2.06	8.88	8.00	8.00	11.00	9.00	10.00	2.69	1.50	1.50
2537	1.23	1.03	1.03	8.41	8.00	8.00	10.69	9.00	10.00	2.33	2.00	2.00
2541	2.20	2.06	2.06	9.44	8.00	9.00	11.49	9.00	10.00	1.94	1.50	1.50
2543	1.10	1.00	1.00	9.42	8.00	7.00	11.26	9.00	8.00	2.63	2.00	2.00

* Not guaranteed.

DESCRIPTIVE LIST OF MANUFACTURERS' SAMPLES, 1900.*

Station number.	Manufacturer, place of business and brand.	
	CLARK'S COVE FERTILIZER CO., BOSTON, MASS.	
2390	Defiance Phosphate	GREAT EASTERN FERTILIZER CO., RUTLAND, VT.
2395	Great Eastern High Grade Potato Manure	PROVINCIAL CHEMICAL FERTILIZER CO., LIMITED, ST. JOHN, N. B.
2392	Provincial Chemical Fertilizer Co.'s Potato Phosphate	THE QUINNIPIAC CO., BOSTON, MASS.
2393	Quinnipiac Climax Phosphate	RUSSIAN CEMENT CO., GLOUCESTER, MASS.
2396	Essex Odorless Lawn Dressing	STANDARD FERTILIZER CO., BOSTON, MASS.
2394	Standard Complete Manure	

ANALYSES OF MANUFACTURERS' SAMPLES, 1900.*

Station number.	NITROGEN.				PHOSPHORIC ACID.								POTASH.	
	Soluble in water.	Insoluble in water.	Total.		Soluble.	Reverted.	Insoluble.	Available.		Total.		Found.	Guaranteed.	
			Found.	Guaranteed.				Found.	Guaranteed.	Found.	Guaranteed.			
2390	% .40	% .68	% 1.08	% .82	% 5.24	% 2.74	% 1.48	% 7.98	% 7.00	% 9.46	% 9.00	% 1.59	% 1.00	
2395	2.38	1.00	3.38	3.29	4.87	3.25	1.86	8.12	6.00	9.98	.....	10.64	10.00
2392	1.99	1.00	2.99	2.88	8.46	1.25	3.64	9.71	8.00	13.35	.....	4.33	6.50
2393	.39	1.06	1.45	1.03	5.10	3.54	1.63	8.64	8.00	10.27	9.00	2.91	2.00	
2396	3.92	.12	4.04	3.70	1.18	4.98	4.87	6.16	6.00	11.03	7.00	6.54	7.00	
2394	2.40	.90	3.30	3.30	7.02	1.99	1.04	8.81	8.00	9.85	9.00	7.56	7.00	

*These goods were received after the March Bulletin was issued.

